NORTH CAROLINA DIVISION OF AIR QUALITY

Air Permit Review

Permit Issue Date: January 5, 2016

Region: Fayetteville Regional Office
County: Montgomery
NC Facility ID: 6200015
Inspector's Name: Gregory Reeves
Date of Last Inspection: 05/14/2015
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Jordan Lumber & Supply Co

Facility Address:
Jordan Lumber & Supply Co
1939 Highway 109 South
Mount Gilead, NC 27306

SIC: 2421 / Sawmills & Planing Mills General
NAICS: 321912 / Cut Stock, Resawing Lumber, and Planing

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 02D .0503, .02D 0504, .02D 0512, .02D .0515, 02D .0516, 02D .0521, 02D .0524, 02D .0530, 02D .1109, 02D .1111, 02D .1806, 02Q .0317
NSPS: Subpart Dc
NESHAP: Subpart DDDD, Subpart ZZZZ, Subpart DDDDD
PSD: Yes
PSD Avoidance: Yes
NC Toxics: N/A
112(r): N/A
Other: N/A

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Jay Jordan Lumber Facility Manager (910) 439-8128 PO Box 98 Mt. Gilead, NC 27306	Robert Jordan Lumber III Co-Owner (910) 439-8000 PO Box 98 Mount Gilead, NC 27306	Conrad Carter, Jr. President (704) 467-1310 PO Box 1760 Albemarle, NC 28002+1760

Application Data

Application Number: 6200015.15A and 6200015.15B
Date Received: 06/01/2015 and 09/21/2015
Application Type: Renewal and TV-Significant
Application Schedule: TV-Renewal

Existing Permit Data
Existing Permit Number: 03469/T22
Existing Permit Issue Date: 03/26/2013
Existing Permit Expiration Date: 02/29/2016

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	5.96	119.75	447.11	108.00	54.66	39.80	20.51 [Methanol (methyl alcohol)]
2013	6.53	66.92	429.43	64.86	74.59	40.23	19.72 [Methanol (methyl alcohol)]
2012	6.79	58.45	372.34	57.98	75.84	36.49	17.00 [Methanol (methyl alcohol)]
2011	6.49	55.93	311.37	152.55	71.04	31.47	14.59 [Methanol (methyl alcohol)]
2010	5.76	49.56	300.66	49.16	62.94	24.50	10.12 [Methanol (methyl alcohol)]

Review Engineer: Betty Gatano

Review Engineer's Signature: **Date:**

Comments / Recommendations:
Issue 03469/T23
Permit Issue Date: 01/05/2016
Permit Expiration Date: 12/31/2020

1. Purpose of Application

Jordan Lumber & Supply, Co. (Jordan Lumber) currently holds Title V Permit No. 03469T22 with an expiration date of February 29, 2016 for a lumber mill in Mt. Gilead, Montgomery County, North Carolina. This permit application is for a permit renewal. The renewal application was received on June 1, 2015, or at least nine months prior to the expiration date, as required by General Permit Condition 3.K. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

On September 21, 2015, Jordan Lumber submitted a "Part 2" TV permit application for the natural gas fired boiler (ID No. B05), which was added to Air Permit No. 03469T21 issued on January 9, 2013. The facility also requested the removal of NC Air toxics requirements in the permit application. This permit application will be processed with the application for TV permit renewal.

2. Facility Description

Jordan Lumber produces dimension lumber from green southern yellow pine. Southern yellow pine logs are trucked to the site and cut into lumber by one of the two sawmills. In the newer of the two sawmills (installed in 2010), the logs are debarked and then cut to specified lengths. The older sawmill operates essentially the same except it processes larger logs. The rough cut lumber from the sawmills is stacked and dried in either six steam-heated kilns (ID Nos. K-03 through K-08) or two direct gasified wood-fired lumber kilns (ID Nos. K-1 and K-2). The green lumber is dried in the kilns for 18-24 hours, depending on the initial moisture content, age and size of the wood. The dried lumber is finished by planning and trimming in two planer mills (ID Nos. P01 and P02). Finished lumber is sorted by length, size, and grade; packaged; and then shipped off site.

Bark from the logs is sold to customers that process it into landscaping material. Scrap lumber is ground into chips and sold to the Unilin plant adjacent to the Jordan Lumber facility. The remaining green wood chips and planer shavings are sold and shipped off site as byproducts.

Steam for the steam-heated kilns (ID Nos. K-3 through K-8) is provided by four wood-fired boilers (ID Nos. B01 through B04) and natural gas-fired boiler (ID No. B05). The wood-fired boilers are fueled by hardwood bark that is brought in from chip mills. Jordan Lumber does not typically burn any of the sawdust or bark from its own operations, as it is generally too wet to provide good boiler operations.

The facility currently has approximately 250 employees and operates its boilers and kilns 24 hours a day, seven days a week. The sawmills operate 8 hours per day, five days per week, or more often depending on business demands.

3. History/Background/Application Chronology

<u>Permit History since Previous Permit Renewal</u>

March 10, 2011	TV permit renewal issued. Air Permit No. 03469T20 was issued on March 10, 2011 with a permit expiration date of February 29, 2016. The requirements for the wood-fired boilers (ID Nos. B01 through B04) under

	15A NCAC 02D .1109, "112j Case-by-Case MACT," were added to the permit under the permit renewal/modification.
January 9, 2013	Air Permit No. 03469T21 was issued for a Part 1 significant modification to add a new 31.5 million Btu per hour, natural gas fired boiler (ID No. B05) and an existing 105 kW, LPG-fired emergency engine (ID No. EG).
March 26, 2013	Air Permit No. 03469T22 was issued as an administrative amendment to modify the dates for testing the wood-fired boilers under 02D .0504 and 02D .0521 to correspond with test dates under the Case-by-Case MACT.

Application Chronology

June 1, 2015	Received application for permit renewal. The permit application was initially assigned to Judy Lee.
June 2, 2015	Greg Reeves of the Fayetteville Regional Office (FRO) provided comments on the permit application.
June 5, 2015	Sent acknowledgment letter indicating that the application for permit renewal was complete.
June 29, 2015	Permit application reassigned to Betty Gatano.
September 3, 2015	Betty Gatano sent e-mail to Conrad Carter, consultant for Jordan Lumber, regarding a Part 2 permit application and questions relating to the permit renewal. Mr. Carter responded via e-mail on September 8, 2015.
Sept. 8 -17, 2015	Betty Gatano and Conrad Carter exchange several e-mails and phone calls regarding the permit renewal and requirements for the Part 2 permit application.
September 21, 2015	Received an application for a Part 2 significant modification for the natural gas fired boiler (ID No. B05).
October 6, 2015	Greg Reeves of FRO provided comments on the Part 2 permit application. Greg indicated the FRO inspector noticed a new cyclone in series with a bagfilter (ID No. BH02) on planer system (ID No. P02). The FRO requested the new cyclone be added to the permit.
October 7, 2015	Draft permit and permit review forwarded for comments. Betty Gatano also asked Conrad Carter to provide more details about the new cyclone.
October 15, 2015	Comments received from Mark Cuilla, Supervisor of the Permitting Section
November 4, 2015	Conrad Carter indicating that the facility had no comments. A diagram of the flow through the control devices on the planer systems (ID Nos. P01 and P02) received from Jay Jordan of Jordan Lumber that same day.

November 5, 2015 Greg Reeves of FRO had no additional comments

November 10, 2015 Photos of the new cyclone and baghouse received from Jay Jordan.

November 17, 2015 Draft permit and permit review sent to public notice.

November 20, 2015 The EPA finalized changes to the "NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters," 40 CFR 63 Subpart DDDDD, which affected the boilers at Jordan.

December 17, 2015 Public comment period ends. No comments received.

January 1, 2016 EPA Comment period ends. No comments received.

January 6, 2016 Due to the revision to 40 CFR 63 Subpart DDDDD, DAQ determined that the permit would need to be sent back to public notice. Betty Gatano sent an e-mail to Jay Jordan notifying him of this decision.

January 12, 2016 Second draft of the permit and permit review forwarded for comments.

January 15, 2016 No additional comments received.

January 19, 2016 Draft permit and permit review returned to public notice, with the revised permit condition for 40 CFR 63 Subpart DDDDD included in the permit.

4. Permit Modifications/Changes and TVEE Discussion

The following table describes the changes to the current permit as part of the permit renewal and modification.

Pages	Section	Description of Changes
Cover and throughout	--	Updated all dates and permit revision numbers.
3	1.0 Equipment List	• Added "MACT Subpart DDDDD" labels for the wood-fired boilers (ID Nos. B01 through B04). • Added footnote specifying compliance dates for the Case-by-Case MACT and 40 CFR Part 63, Subpart DDDDD for the boilers (ID Nos. B01 through B04). • Updated control system for the planer/hog wood waste collection system (ID No. P02) by adding a cyclone (ID No. C07) before the bagfilter (ID No. BH02). • Removed footnote specifying that emission source (ID No. B05) is listed as a 15A NCAC 02Q .0501(c)(2) modification. The Permittee submitted Permit Application No. 6200015.15B in fulfillment of the requirements under 02Q .0501(c)(2).
4	2.1.A – Regulations Table	• Removed initial notification requirements under 15A NCAC 02D .0524. • Added reference to 40 CFR Part 63, Subpart DDDDD for the boilers (ID Nos. B01 through B04).

Pages	Section	Description of Changes
4	2.1.A.1.c	Revised the testing requirements under 15A NCAC 02D .0504 to require testing of boilers (ID Nos. B01 and B03) within 24 months of permit issuance.
6	2.1.A.3.b	Revised the testing requirements under 15A NCAC 02D .0521 to require testing of boilers (ID Nos. B01 and B03) within 24 months of permit issuance.
7	2.1.A.4	Removed initial notification requirements under 15A NCAC 02D .0524.
8	2.1.A.5.b	Added condition indicating that the boilers (ID Nos. B01 through B04) will be subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD beginning May 20, 2019.
8	2.1.A.5.c (new numbering)	• Revised testing condition under 15A NCAC 02D .1109 to require testing of boilers (ID Nos. B01 and B03) within 24 months of permit issuance. • Added requirement to retest boiler (ID No. B04) within 22 to 24 months of previous testing to demonstrate compliance with the emission limits for carbon monoxide and hydrogen chloride. • Added requirements to retest boiler (ID Nos. B02) for all pollutants and boiler (ID Nos. B04) for particulate matter and mercury by May 19, 2019.
9 – 15	2.1.A.6	Added permit condition for 40 CFR Part 63, Subpart DDDDD. The boilers (ID Nos. B01 through B04) will be subject to 40 CFR Part 63, Subpart DDDDD beginning May 20, 2019.
15	2.1.B	Updated control system for the planer/hog wood waste collection system (ID No. P02) by adding a cyclone (ID No. C07) before the bagfilter (ID No. BH02).
15	2.1.B.1.b	Added requirements to inspect cyclone (ID No. C07) to ensure compliance with 15A NCAC 02D .0512, "Particulates from Wood Products Finishing Plants."
17	2.1.C Regulations Table	Removed reference to 15A NCAC 02D .1100. The kilns (ID Nos. K-3 through K-8) are exempt from NC Air Toxics.
18	2.1.D Regulations Table	Removed reference to 15A NCAC 02D .1100. The kilns (ID Nos. K-1 and K-2) are exempt from NC Air Toxics.
20	2.1.E Regulations Table	Corrected the value for the allowable PM emissions under 15A NCAC 02D .0503.
20	2.1.E.1.a	Corrected the value for the allowable PM emissions under 15A NCAC 02D .0503.
21	2.1.E.4. b through e	Updated permit condition for 40 CFR 60 Subpart Dc to most current permit language.
21 – 24	2.1.E.5	Updated permit condition for 40 CFR 63 Subpart DDDDD for a natural gas boiler to most current permit language.
25 – 28	2.1.F.3	Updated permit condition for 40 CFR 63 Subpart ZZZZ for emergency generator to most current permit language.
29	2.2.A.2.d	Clarified the monitoring language under the avoidance condition for 15A NCAC 02D .0530.
30	2.2.A.2.e.ii	Clarified reporting language under the avoidance condition for 15A NCAC 02D .0530.
--	2.2.B	Removed requirements under 15A NCAC 02D .1100. The kilns (ID Nos. K-1 through K-8) are exempt from NC Air Toxics.

Pages	Section	Description of Changes
30 – 41	3.0	Updated the General Conditions and the List of Acronyms to the most current version (V4.0: 12/17/2015).

The following changes were made to the TVEE under this permit renewal/modification:

- Added "MACT DDDDD" labels to boilers (ID Nos. B01 through B04).
- Updated control system for the planer/hog wood waste collection system (ID No. P02) by adding a cyclone (ID No. C07) before the bagfilter (ID No. BH02).

5. Regulatory Review

Jordan Lumber is subject to the following regulations. The permit will be updated to reflect the most current stipulations for all applicable regulations.

- 15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers – The natural gas-fired boiler (ID No. B05) is subject to 02D .0503. Allowable PM emissions are determined from the equation $E = 1.090(Q)^{-0.2594}$, where E equals the allowable emission limit for particulate matter (PM), in pounds per million Btu, and Q equals the maximum heat input in million Btu per hour. Because this boiler is the only fuel burning boiler onsite, Q equals 31.5 million Btu per hour, which is the heat input for the boiler. With this Q, allowable PM emissions for this boiler are 0.45 pounds per million Btu.

  The PM emission limit of 0.21 pounds per million Btu for the natural gas-fired boiler in the permit is incorrect. The definition for fuel under 02D .0503(d) specifically excludes wood. The previous PM emission limit was determined including the heat input for the wood-fired boilers (ID Nos. B01 through B04). This mistake will be corrected under this permit renewal.

  The emission factor for firing natural gas in a boiler is 0.007 pounds per million Btu as provided in DAQ's "Natural Gas Combustion Emission Calculator Revision K" (06/19/2012). Thus, no monitoring, recordkeeping, or reporting is required to ensure compliance for this rule. Continued compliance is anticipated.

- 15A NCAC 02D .0504, Particulates from Wood Burning Indirect Heat Exchangers – The wood-fired boilers (ID Nos. B01 through B04) are subject to 02D .0504. Allowable PM emissions are determined from the equation $E = 1.1698(Q)^{-0.2230}$, where E equals the allowable emission limit for PM (in pounds per million Btu) and Q equals the maximum heat input in million Btu per hour. The allowable PM emissions from the wood-fired boilers are shown in the following table.

Emission Source	Heat Input of the Emission Sources (million Btu/hr)	Maximum Heat Input (million Btu/hr)	Emission limit (lb/million Btu)
Wood-fired boiler with pyrolytic-type burners and without flyash reinjection (ID Nos. B01 – B03)	26.8, each	80.4	0.44
Wood-fired boiler with a stoker-type burner and without flyash reinjection (ID No. B04)	28.8	109.2	0.41

  In addition to inspection and maintenance requirements, Jordan Lumber was required to conduct PM emission testing of boiler B04 and either boiler B01 or B02 during previous permitting cycle

to demonstrate compliance with 02D .0504. The following table summarizes this testing and other PM emission testing conducted on the wood-fired boilers at Jordan Lumber.

Source	Dates	PM Emission Result (lb/mm Btu)	Allowable Emission Rate (lb/mm Btu)
Boiler B03	11/10/1998	0.26 (filterable)	0.44
Boiler B02	09/16 – 19/2014	0.248	
Boiler B04	08/14/2001	0.41	0.41
Boiler B04	03/04 – 05/2014	0.249 (filterable)	
Boiler B04	09/18/2014	0.253	

FRO recommends the two other wood-fired boilers (ID Nos. B01 and B03) be required to perform source testing during the first two years of this next five-year permit cycle. These testing requirements will be added to the permit under this renewal. No other changes to the monitoring, recordkeeping, or reporting requirements are needed. Continued compliance is anticipated.

- 15A NCAC 02D .0512, Particulates from Wood Products Finishing Plants – Two planer/hog wood waste collection systems (ID Nos. P01 and P02) are subject to 02D .0512. Jordan Lumber has to conduct inspection and maintenance of the bagfilters on these sources to ensure compliance. No changes to the monitoring, recordkeeping, or reporting requirements are needed under this renewal, and continued compliance is anticipated.

- 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes – The two direct gasified wood-fired lumber drying kilns (ID Nos. K-1 and K-2) are subject to 02D .0515. No monitoring, recordkeeping, or reporting is required to demonstrate compliance with this particulate matter standard. No changes to the permit are required, and continued compliance is expected.

- 15A NCAC 02D .0516, Sulfur Dioxide from Combustion Sources – The wood-fired boilers (ID Nos. B01 through B04), the natural gas-fired boiler (ID No. B05), the direct gasifier wood-fired lumber kilns (ID Nos. K-1 and K-2), and the LPG-fired emergency generator (ID No. EG) are subject to 02D .0516. No monitoring, recordkeeping, or reporting is required when firing natural gas, wood, or LPG because of the low sulfur content of the fuels. These fuels are inherently low enough in sulfur that continued compliance is expected. No changes to the monitoring, recordkeeping, or reporting are required under this permit renewal.

- 15A NCAC 02D .0521, Control of Visible Emissions –The following equipment was manufactured after July 1, 1971 and must not have visible emissions of more than 20 percent opacity when averaged over a six-minute period, except as specified in 15A NCAC 02D .0521(d).
  - Four wood-fired wood boilers (ID Nos. B01 through B04) - To ensure compliance with 02D .0521, the facility is required to conduct daily visible emission observations. In addition, Jordan Lumber was required to conduct opacity emission testing of boiler B04 and either boiler B01 or B02 within the previous permitting cycle to demonstrate compliance with 02D .0521. The results of the testing are shown in the following table.

Source	Dates	Opacity (Highest 6 minute average)
Boiler B02	09/16 – 19/2014	8.1%
Boiler B04	09/18/2014	6.5%

FRO recommends Jordan Lumber perform opacity testing on the two other wood-fired boilers (ID Nos. B01 and B03) during the first two years of this next five-year permit cycle. These testing requirements will be added to the permit under this renewal. No other changes to the monitoring, recordkeeping, or reporting requirements are needed. Continued compliance is anticipated.

- Two direct gasified wood-fired lumber drying kilns (ID Nos. K-1 and K-2), natural gas fired-boiler (ID No. B05), and the LPG-fired emergency generator (ID No. EG) – No monitoring, recordkeeping, or reporting is required to demonstrate compliance with 02D .0521. Continued compliance is anticipated.
- Two planer/hog wood waste collection systems (ID Nos. P01 and P02) - To ensure compliance with 02D .0521, the facility is required to conduct daily visible once every six months. No changes to the monitoring, recordkeeping, or reporting are required under this permit renewal, and continued compliance is expected.

- 15A NCAC 02D .0524, New Source Performance Standards (NSPS) – The wood-fired boilers (ID Nos. B01 through B04) and the natural gas-fired boiler (ID No. B05) are subject to "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," 40 CFR Part 60, Subpart Dc. More discussion on NSPS is found in Section 6.

- 15A NCAC 02D .0530, Prevention of Significant Deterioration (PSD) – The direct gasified wood-fired lumber kilns (ID Nos. K-1 and K-2) and the six steam-heated lumber kilns (ID Nos. K-3 through K-8) are subject to Best Available Control Technology (BACT) for VOCs under 02D .0530. More discussion on PSD and BACT is found in Section 6.

- 15A NCAC 02D .1109, Case-by-Case MACT – The four wood-fired boilers (ID Nos. B01 through B04) are subject to the Case-by-Case MACT requirements under 112(j). More discussion on the MACTs is provided under Section 6.

- 15A NCAC 02D .1111, Maximum Achievable Control Technology (MACT) – The facility is subject to the following MACTs:
  - Two direct gasified wood-fired lumber drying kilns (ID Nos. K-1 and K-2) and six steam-heated lumber kilns (ID Nos. K-3 through K-8) – "NESHAP for Plywood and Composite Wood Products," 40 CFR Part 63 Subpart DDDD.
  - LPG-fired emergency generator (ID No. EG) – "NESHAP for Stationary Reciprocating Internal Combustion Engines," 40 CFR Part 63 Subpart ZZZZ.
  - Four wood-fired boilers (ID Nos. B01 through B04) and natural gas-fired boiler (ID No. B05) – "NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters," 40 CFR Part 63 Subpart DDDDD (MACT Subpart DDDDD).

  More discussion on these MACTs is provided under Section 6.

- 15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions – This condition is applicable facility-wide and is state enforceable only. No changes are needed under this permit renewal, and continued compliance is anticipated.

- 15A NCAC 02Q .0317, Avoidance Conditions – Jordan Lumber has accepted an avoidance condition for 02D .0530, PSD, for PM, PM10, NOx, and CO. More discussion on PSD avoidance is provided under Section 6.

6. NSPS, NESHAPS/MACT, NSR/PSD, RACT, 112(r), CAM

NSPS

The four wood-fired boilers (ID Nos. B01 through B04) and the natural gas-fired boiler (ID No. B05) are subject to the NSPS for Small Industrial, Commercial, Institutional Steam Generating Units, 40 CFR Part 60 Subpart Dc. This subpart applies to boilers constructed, modified, or reconstructed after June 9, 1989 and have a maximum design heat input capacity > 10 million Btu per hour and < 100 million Btu per hour. The requirements for boilers subject to NSPS Subpart Dc vary based on the size of the boiler and fuel type fired. The table below summarizes the boilers and their requirements under NSPS Subpart Dc.

Boiler	Size	Requirements
Wood-fired boilers (ID Nos. B01 through B03)	26.8 million Btu/hr (each)	No SO_2 standards for wood-fired boilers. No PM or opacity standards for wood-fired boilers less than 30 million Btu/hr. Amount of wood-fired daily (or alternatively monthly) must be recorded per 40 CFR 60.48c(g)(1) and (2).
Wood-fired boiler (ID No. B04)	28.8 million Btu/hr	
Natural gas-fired boiler (ID No. B05)	31.5 million Btu/hr	No SO_2, PM, or opacity standards for natural gas-fired boilers. Amount of natural gas fired daily (or alternatively monthly) must be recorded per 40 CFR 60.48c(g)(1) and (2).

All boilers at the facility have been installed and are in operation, including the most recently installed boiler (ID No. B05). A start up notification for Boiler B05 was received on March 11, 2013. Requirements for start-up notifications will be removed under this permit renewal.

The permit currently requires the facility to record the amount of wood-fired in the boilers (ID Nos. B01 through B04) daily. The permit condition will be modified to allow the amount of fuel to be recorded monthly as specified under 40 CFR 60.48c(g)(2).

Continued compliance is anticipated.

NESHAPS/MACT

Jordan Lumber is major for HAPs and is subject to the MACTs discussed in this section.

Case-by-Case MACT

The Case-by-Case MACT requirements were added to the permit under Air Permit No. 03469T20 issued on March 10, 2011, with a compliance date of March 10, 2014. Under the Case-by-Case MACT, the wood-fired boilers (ID Nos. B01 through B04) are subject to emission limits for total selective metals (TSM) (in lieu of PM), mercury (Hg), hydrogen chloride equivalent (HCl), and carbon monoxide (CO). The permit requires the facility to conduct source testing on boilers B04 and either B01 or B02 to demonstrate compliance with the emission limits. The facility conducted testing on B04 and B02 beginning March 2014. The initial testing encountered difficulties and was suspended. The testing was completed in September 2014. The results of the testing were approved by Shannon Vogel of the Stationary Source Compliance

Branch and summarized in a memoranda dated September 22, 2015. The results are also summarized in the table below.

Pollutant	Emission Limit	Boiler B02	Boiler B04
TSM	0.0003 lb/mm Btu	0.000099 lb/mm Btu	0.00014 lb/mm Btu
Hg	5E-6 lb/mm Btu	1.5E-6 lb/mm Btu	1.49 E-6 lb/mm Btu
HCl	188.5 lb/hr from all four boilers	1.55 lb/hr	0.95 lb/hr[1]
CO	269 ppmvd @ 7% oxygen	136.1 @ 7% oxygen	225.6 @ 7% oxygen

Notes:
1. The DAQ concluded in a memorandum dated September 22, 2015 that the HCl test results are insufficient to meet the reduced frequency of testing requirements for boiler B04.

As specified in permit condition 2.1.A.5.b for the Case-by-Case MACT, biennial (every 22 to 26 months) testing is required for the boilers. The testing frequency can be reduced to every five years if a stack test shows that the emission rate of any pollutant is less than or equal to 80 percent of the allowable limit. The results of the testing confirmed that emissions of TSM, Hg, HCl, and CO are less than 80 percent of the allowable limit for boiler B02. Subsequent testing for this boiler will be due five years from the prior test.

Testing for boiler B04 is more complicated. The testing was commenced in March of 2014, and results of the March testing showed compliance with TSM, Hg, and CO. A problem encountered during testing involved a combined EPA Method 5/26A sampling train for PM/HCl emissions. EPA has recently issued verbal guidance stating that this combined sampling train is not acceptable for compliance. The DAQ concluded in a memorandum dated September 22, 2015 that the HCl test results are insufficient to meet the reduced frequency of testing requirements in Permit Condition 2.1.A.5.b. Additionally, CO emissions from boiler B04 were 84 percent of the emission limit. Therefore, Jordan Lumber will be required to conduct a retest of boiler B04 for HCl and CO within 22 to 26 months of the initial compliance test on March 4 and 5, 2014.

The permit will also require that the Jordan Lumber conduct testing on boilers B01 and B03 to demonstrate compliance with the Case-by-Case emission limits noted above. The testing will be required within 24 months of permit issuance. In summary, the schedule for compliance testing for the wood-fired boilers (ID Nos B01 through B04) under the Case-by-Case MACT is presented in the table below.

Boiler	Pollutant	Test Date
B02	TSM, Hg, HCl, CO	The facility must conduct testing by May 19, 2019. This date is approximately five years (62 months) from the previous testing that commenced in March of 2014.
B04	TSM, Hg	The facility must conduct testing by May 19, 2019. This date is approximately five years (62 months) from the previous testing that commenced in March of 2014.
B04	CO, HCl	The facility must conduct testing within 22 to 26 months of March 5, 2014.
B01 and B03	TSM, Hg, HCl, CO	The facility must conduct testing within 24 months of permit issuance.

Under the permit renewal, the permit was modified to specify that Jordan Lumber must comply with the Case-by-Case MACT standards until May 19, 2019. Beginning on May 20, 2019, the facility must comply with the MACT Subpart DDDDD standards for these boilers, as discussed below.

MACT Subpart DDDDD
The wood-fired boilers (ID Nos. B01 through B04) will be subject to the "NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers," 40 CFR Part 63 Subpart DDDDD beginning on May 20, 2019. The requirements under MACT Subpart DDDDD are being added at this time per 40 CFR 63.56(b), which states "if the Administrator promulgates a relevant emission standard under section 112(d) or (h) of the Act that is applicable to a source after the date a permit is issued pursuant to §63.52 or §63.54, the permitting authority must incorporate requirements of that standard in the title V permit upon its next renewal."

All four boilers are in the subcategory for "Stoker/sloped/others designed to burn wet biomass fuel" (Item 7 on Table 2 to 40 CFR Part 63 Subpart DDDDD of Part 63). They are also considered existing boilers because they were constructed prior to June 4, 2010. Existing boilers in the above subcategory have to meet the following emission limits:

Pollutant	Emission Limit
HCl	2.2E-02 lb per MMBtu of heat input
Hg	5.7E-06 lb per MMBtu of heat input
CO	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen; 3-run average
PM or TSM	3.7E-02 lb per MMBtu of heat input or 2.4E-04 lb per MMBtu of heat input

Beginning on May 20, 2019, the facility must comply with the MACT Subpart DDDDD standards for these boilers. Jordan Lumber is required to conduct an initial compliance test within 180 days of May 20, 2019 on boilers (ID Nos. B01 through B04) to demonstrate compliance with these limits. However, recent EPA guidance indicates that any previous test data can satisfy the initial compliance requirement in MACT Subpart DDDDD, provided the operating conditions are the same and the test meets all the rule requirements.[1] Subsequent testing will be required annually, depending on testing results. As specified in 40 CFR 63.7515, if performance tests for a given pollutant for at least 2 consecutive years show emissions at or below 75 percent of the emission limit for the pollutant, the facility may elect to conduct performance tests for the pollutant every third year. Alternatively, the facility can demonstrate compliance via fuel sampling for HCL, Hg and/or TSM (if chosen rather than filterable PM), with subsequent fuel sampling to be performed monthly if applicable.

The facility also has to conduct an annual tune-up on the boilers, a one-time energy assessment, and monitoring, recordkeeping and reporting as required by MACT Subpart DDDDD. A permit condition for MACT Subpart DDDDD for boilers (ID Nos. B01 through B04) will be added under this permit renewal. The permit condition is provided in Attachment 1.

[1] "Boiler MACT, 40 CFR Part 63, Subpart DDDDD (5D)," June 15, 2015, p. 13. http://www3.epa.gov/airtoxics/boiler/boilermactqanda.pdf

The natural gas boiler (ID No. B05) is also subject to MACT Subpart DDDDD. It is a new source under the MACT because it was constructed after June 6, 2010 and it falls under the subcategory for "Units designed to burn gas 1 fuels." Jordan Lumber has to conduct annual tune-ups and recordkeeping and reporting as required by MACT Subpart DDDDD. The permit condition will be updated to the most current version under this permit renewal.

MACT Subpart DDDD
The direct gasified wood-fired lumber kilns (ID Nos. K-1 and K-2) and six steam-heated lumber kilns (ID Nos. K-3 through K-8) are subject to the "NESHAP for Plywood and Composite Wood Products," 40 CFR Part 63 Subpart DDDD. The only requirement under MACT Subpart DDDD for these emission sources is an initial notification, which has been submitted for all kilns except for the steam-heated drying kiln (ID No. K-8). This kiln has not yet been installed. The permit condition requiring submittal of an initial notification within 15 days of startup will remain in the permit. No changes to the permit are required under this permit renewal, and continued compliance is anticipated.

MACT Subpart ZZZZ
The LPG-fired emergency generator (ID No. EG) is subject to the "NESHAP for Stationary Reciprocating Internal Combustion Engines," 40 CFR Part 63 Subpart ZZZZ. This engine is a spark ignition, existing engine, constructed before June 12, 2006. It is less than 500 HP and is located at a major source of HAPs. The following provides an overview of the requirements under MACT Subpart ZZZZ for this engine:

- Install a non-resettable hour meter on the engine and record hours of operation.
- Change oil and filter every 500 hours of operation or annually, whichever comes first.
- Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first.
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace if necessary.
- Operate a maximum of 100 hours for maintenance and readiness testing.
- Conduct other required recordkeeping and reporting.

The permit condition will be updated to reflect the most current permitting language under this permit renewal. Continued compliance is expected.

PSD
The facility is a PSD major source for VOC, with actual emissions greater than 250 tons per consecutive 12 month period. Jordan Lumber is subject to BACT for each of its eight lumber drying kilns (ID Nos. K-1 through K-8). Specifically, kilns 3 through 8 are subject to a VOC emission rate of less than 3.97 pounds per thousand board feet, as pinene, and kilns 1 and 2 are subject to a VOC emission rate of less than 4.29 pounds per thousand board feet, as pinene. These conditions were placed into the permit as part of a PSD modification for the construction of a steam-heated drying kiln and a natural gas/landfill gas fired boiler in November 2005. The preliminary BACT determination for Jordan Lumber provides more details about these BACT limits.[2] This permit renewal does not affect the status, and no changes to the BACT permit condition are required. Continued compliance is anticipated.

[2] William Willets (September 2009).

At that same time the BACT limits were added for VOC, the permit was also modified to include a PSD avoidance condition for PM, PM_{10}, NOx, and CO. The avoidance condition emission limits represent the then actual baseline amounts (from June 2003 through May 2005) plus the PSD significance levels for each respective pollutant. The table below summarizes the PSD avoidance limits. The preliminary BACT determination for Jordan Lumber provides more details about the development of these PSD limits.[1]

Pollutants	Planer Emissions (Tons/year)	Kiln Emissions (Tons/year)	Wood-fired Boiler Emissions (Tons/year)	Total Facility Emissions (Tons/year)	PSD Significance Level (Tons)	Avoidance Limit (Tons/year)
PM	2.83	1.69	114	119	25	144
PM_{10}	--	1.69	105	106	15	121
NO_X	--	--	68.4	68.4	40	108.4
CO	--	--	187	187	100	287
Notes: The baseline emissions were determined from actual baseline amounts from June 2003 through May 2005.						

This permit renewal does not affect the PSD status of the facility. The permit condition will be changed under the permit renewal to clarify the recordkeeping and reporting requirements. No other changes are required, and continued compliance is anticipated.

112(r)

The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in 112(r). This permit renewal does not affect the 112(r) status of the facility.

CAM

40 CFR Part 64 is applicable to any pollutant-specific emission unit, if the following three conditions are met:

- the unit is subject to any (non-exempt: e.g. pre November 15, 1990, Section 111 or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- the unit uses any control device to achieve compliance with any such emission limitation or standard.
- the unit's pre-control potential emission rate exceeds either 100 tpy (for criteria pollutants) or 10/25 tpy (for HAPs).

The permit review for the most recent TV permit renewal confirmed that CAM was not applicable to Jordan Lumber because potential, pre-controlled PM_{10} emissions from the boilers and planer/wood hog are less than the CAM threshold, as calculated per DAQ spreadsheets. A natural gas-fired boiler (ID No. B05) and an existing 105 HP, LPG-fired emergency (ID No. EG) have been added since the last permit renewal. Neither of these have control devices nor are they subject to CAM.

7. Facility Wide Air Toxics

The most recent air modeling for compliance with NC Air Toxics was conducted in association with a PSD modification to add one steam-heated drying kiln and natural gas/landfill gas fired boiler. The modeled emission rates for the kilns (ID Nos. K-1 through K-8) were added to Air Permit No. 03469T15 issued on November 7, 2005. The permit condition requires no monitoring, recordkeeping or reporting to ensure compliance with NC Air Toxics.

Kilns (ID Nos. K-1 through K-8) are subject to MACT Subpart DDDD. Per 15A NCAC 02Q .0702(a)(27), an air emission source subject to 40 CFR Part 63 (i.e., MACT) is exempt from NC Air Toxics. The facility has requested that the modeled emission rates be removed from the permit as allowed per 02Q .0702(a)(27). The DAQ reviewed the modeled emission limits to ensure that their removal resulted in no unacceptable risk to human health. Potential emissions used in the modeling were based on assuming each kiln was operated at its maximum charge capacity for 8,760 hours per year. The results of the 2005 modeling are provided in the table below.

TAP	Averaging Period	% of the AAL
Acrolein	1-hour	12%
Arsenic	Annual	99%
Benzene	Annual	38%
Cadmium	Annual	1%
Formaldehyde	1-hour	30%
Hexachlorodibenzo-p-dioxin	Annual	26%
Hydrogen Chloride	1-hour	1%
Phenol	1-hour	3%

Notes:
- Potential emissions used in modeling were based on the capacity of each kiln operating at 8760 hours per year.
- The arsenic AAL has been modified since the 2005 air modeling. The value in this table was based on an arsenic AAL 2.3E-7 mg/m^3. The current AAL for arsenic is 2.1E-6 mg/m^3.

At the potential emissions, the modeled concentrations for all TAPs were well below their acceptable ambient levels (AALs), with the exception of arsenic. Emissions of arsenic resulted in air concentrations at approximately 99 percent of the AAL. However, the arsenic AAL has been revised since the 2005 air modeling. The previous AAL for arsenic was 2.3E-7 mg/m^3, and it has since been increased to 2.1E-6 mg/m^3. The modeled emissions are approximately 11 percent of the revised AAL for arsenic. Given the margin of compliance with the AAL for all TAPs modeled, removal of the air toxics limits poses no unnecessary risk to human health. Thus, these limits will be removed under this permit renewal.

8. Facility Emissions Review

The potential emissions have not been modified under this permit renewal. Actual emissions for criteria pollutants and HAPs are provided in the header of this permit review.

9. Compliance Status

During the most recent inspection was conducted on May 14, 2015 by Gregg Reeves of the FRO, the facility appeared to operate in compliance with all applicable air quality regulations and permit conditions, with the exception of a missing record for the required annual tune-up for Boiler B05. Documentation of this tune-up was subsequently supplied via e-mail on May 27, 2015. Additionally,

a signed Title V Compliance Certification (Form E5) indicating that the facility was in compliance with all applicable requirements was included with the permit renewal.

The five year compliance history for Jordan Lumber is provided below:

- A Notice of Violation (NOV) was issued on January 19, 2010 for record keeping violations.
- A Notice of Deficiency (NOD) was submitted on June 15, 2012 for excess visible emission from several boilers.
- A NOV was issued on September 29, 2014 for late notification of stack testing.
- A NOV was issued on December 17, 2014 for late submittal of stack testing results for testing of boilers (ID Nos. B02 and B04)
- A NOV was issued on May 6, 2015 for late submittal of a Notice of Compliance Statement following the completion of the final required performance testing on the boilers, which occurred on November 17, 2014.
- A Notice of Violation/Notice of Recommendation for Enforcement (NOV/NRE) was issued on September 28, 2015 for failure to submit a "Part 2" permit application within 12 months of startup of boiler (ID No. B05). FRO intends to seek a civil penalty assessment for this violation.

All NODs, NOVs, and NOV/NREs have been resolved.

11. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. South Carolina and Mecklenburg County Air Quality are within 50 miles of the facility.

12. Other Regulatory Considerations

- A P.E. seal is NOT required for these applications (6200015.15A and 6200015.15B).
- A zoning consistency determination is NOT required for these applications (6200015.15A and 6200015.15B).
- A permit fee of $918 was required for permit application 6200015.15B and was received on September 23, 2015.

13. Recommendations

The permit renewal application for Jordan Lumber & Supply Co in Mt. Gilead, Montgomery County, NC has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 03469T23.

Attachment 1

MACT Subpart DDDDD Permit Condition for Boiler (ID Nos. B01 through B04)

6. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, 40 CFR 63.7490(d), 40 CFR 63.7499(i) and (p)]

a. For the existing boilers **(ID Nos. B01 through B04**), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A, "General Provisions."
   i. The Permittee shall comply with the CAA §112(j) standard in Section 2.1.A.5 through **May 19, 2019,** as specified in Section 2.1.A.5, above. The Permittee shall be subject to the requirements of 40 CFR 63, Subpart DDDDD, starting **May 20, 2019**.

Definitions and Nomenclature [40 CFR 63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A, "General Provisions" according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [40 CFR 63.7510(e), 40 CFR 63.56(b)]

d. The Permittee shall complete initial tune up (Section 2.1.A.6.z) and the one-time energy assessment (Section 2.1.A.6.dd) no later than **May 20, 2019**.

e. The Permittee shall complete the initial compliance requirements in Sections 2.1.A.6.l, m., n., r., s., t., and u. no later than 180 days after **May 20, 2019** and according to the applicable provisions in 40 CFR 63.7(a)(2).

Notifications [40 CFR 63.7545]

f. The Permittee shall submit the following notifications:
   i. Notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
   ii. Notification of intent to conduct a performance evaluation of the CMS(s) simultaneously with the notification of the performance test date required, or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required. [40 CFR 63.8(e)]

g. The Permittee shall submit, for the initial compliance demonstration for each affected unit, a Notification of Compliance Status report, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in 40 CFR 63.7545 (e)(1) through (8), as applicable.

General Compliance Requirements [40 CFR 63.7505(a), 40 CFR 63.7500]

h. At all times the affected unit(s) is operating, the Permittee shall be in compliance with the emission standards in Section 2.1.A.6.j, except during periods of startup and shutdown.

i. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Emission Limits [15A NCAC 02Q .0508(f), 40 CFR 63.7500(a)(1), Table 2]

j. The affected units shall meet the following emission limits, except as provided at 40 CFR 63.7522 (i.e., emissions averaging):

Pollutant	Emission Limit
Hydrochloric Acid (HCl)	2.2E-02 lb per MMBtu of heat input
Mercury (Hg)	5.7E-06 lb per MMBtu of heat input
Carbon monoxide (CO)	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen; 3-run average
Filterable Particulate Matter(PM) or Total Suspended Metals (TSM)	3.7E-02 lb per MMBtu of heat input or 2.4E-04 lb per MMBtu of heat input

Testing [15A NCAC 02Q .0508(f)]

k. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test(s) are above the limit given in Section 2.1.A.6.j. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Initial compliance requirements[3] [40 CFR 63.7510]

l. For filterable PM (if chosen rather than TSM) and CO, the Permittee shall demonstrate compliance with the limits in Section 2.1.A.6.j. by developing one of the following:
   i. A site-specific stack test plan and conducting an initial stack test(s) according to 40 CFR 63.7520; or
   ii. A site-specific fuel monitoring plan and conducting fuel analyses according to 40 CFR 63.7521.

m. For HCl, Hg and/or TSM (if chosen rather than filterable PM), the Permittee shall demonstrate compliance with the emission limits in Section 2.1.A.6.j. by developing one of the following:
   i. A site-specific stack test plan and conducting an initial stack test(s) according to 40 CFR 63.7520; or
   ii. A site-specific fuel monitoring plan and conducting fuel analyses according to 40 CFR 63.7521.

n. The Permittee shall establish operating limits for operating load, minimum oxygen level, maximum pollutant emission rates (if necessary) according to 40 CFR 63.7530.

o. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1.A.6.c. through n. are not met.

[3] Recent EPA guidance indicates that any previous test data can satisfy the initial compliance requirement in 40 CFR Part 63, Subpart DDDDD, provided operating conditions are the same and the test meets all rule requirements. "Boiler MACT, 40 CFR Part 63, Subpart DDDDD (5D)," June 15, 2015, p. 13. http://www3.epa.gov/airtoxics/boiler/boilermactqanda.pdf

Subsequent compliance test and fuel analysis requirements [40 CFR 63.7515]

p. For each pollutant for which initial compliance was demonstrated with a source test, the Permittee shall conduct all subsequent stack tests on an annual basis, except as specified in 40 CFR 63.7515.

q. For each pollutant for which initial compliance was demonstrated with a fuel analysis, the Permittee shall conduct all subsequent fuel analyses and determine the applicable pollutant emission rates on a monthly basis, except as specified in 40 CFR 63.7515.

Monitoring Requirements [15A NCAC 02Q .0508(f)]

r. The Permittee shall install, operate, and maintain an oxygen analyzer system(s) according to 40 CFR 63.7525(a).

s. The Permittee shall record operating load data every 15 minutes according to 40 CFR 63.7540.

t. The Permittee shall install, operate, and maintain a continuous opacity monitoring system according to 40 CFR 63.7525(c).

u. The Permittee shall develop site-specific monitoring plan(s) according to the requirements in 40 CFR 63.7505(d)(1) through (4).

v. The Permittee shall maintain the 30-day rolling average oxygen content for each unit at or above the lowest hourly average oxygen concentration measured during the most recent CO performance test. [40 CFR 63.7500(a)(2)]

w. The Permittee shall maintain the operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test. [40 CFR 63.7500(a)(2)]

x. If the Permittee demonstrates compliance with emission limits using fuel analysis, the Permittee shall maintain the 12-month rolling average emission rate for HCl, Hg, and/or TSM at or below the applicable emission limit.

y. The Permittee shall maintain opacity to less than or equal to 10 percent opacity (daily block average). [40 CFR 63.7500(a)(2)]

Work Practice Standards [15A NCAC 02Q .0508(f)]

z. The Permittee shall conduct a tune-up of the affected source annually as specified below.
   i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown;
   ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
   iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the inspection until the next scheduled unit shutdown;
   iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and
   v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

   [40 CFR 63.7500(a)(1), 40 CFR 63.7540(a)(10)]

aa. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]

bb. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of restart. [40 CFR 63.7540(a)(13), 40 CFR 63.7515(g)]

cc. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1.A.6.p. through bb. are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

dd. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) appropriate for the on-site technical hours listed in 40 CFR 63.7575:
[40 CFR 63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

ee. The Permittee shall keep the following:
   i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
   ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

ff. For each continuous monitoring system the Permittee shall keep the following records:
   i. Records described in 40 CFR 63.10(b)(2)(vii) through (xi).
   ii. Monitoring data for continuous opacity monitoring system during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) and (ii).
   iii. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
   iv. Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i).
   v. Records of the date and time that each deviation started and stopped.

gg. The Permittee shall keep records of all monitoring data and calculated averages for applicable operating limits to show continuous compliance with each emission limit and operating limit that applies.

hh. For each boiler or process heater the Permittee shall keep the following:
   i. records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.
   ii. for Hg, HCl and TSM, copies of all calculations and supporting documentation of maximum pollutant fuel input or pollutant emission rates as described in 40 CFR 63.7555.
   iii. records to support stack testing less frequently than annually (if applicable) as described in 40 CFR 63.7555(6).
   iv. records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.
   v. records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater or monitoring equipment to its normal or usual manner of operation.
   vi. records of the calendar date, time, occurrence and duration of each startup and shutdown.
   vii. records of the type(s) and amount(s) of fuels used during each startup and shutdown.
   viii. records associated with emissions averaging as described in 40 CFR 63.7555(e).

ii. The Permittee shall maintain on-site and submit, if requested by the Administrator, an annual report associated with each boiler tune up, containing the following information:
   i. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
   ii. A description of any corrective actions taken as a part of the combustion adjustment; and

iii. The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

jj. The Permittee shall:
   i. maintain records in a form suitable and readily available for expeditious review;
   ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
   iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

   [40 CFR 63.7560, 63.10(b)(1)]

kk. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in Sections 2.1.A.6.ee through jj.

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7550]

ll. The Permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June.
   i. The first compliance report shall be postmarked on or before **January 30, 2020** and cover the period from **May 20, 2019** through **December 31, 2019**.
   ii. The compliance report must also be submitted electronically through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.7550(h)(3)]

mm. The compliance report shall contain the information in 40 CFR 63.7550(c) depending on how the facility chooses to comply with the limits.

nn. For each deviation from an emission limit or operating limit, the report shall contain the information in 40 CFR 63.7550(d) and (e).

oo. Within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) as required by this subpart, the Permittee shall submit the results of the performance tests, including any associated fuel analyses, to the DAQ pursuant to 40 CFR 63.10(d)(2) and to the EPA via the procedures in 40 CFR 63.7550(h).